

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) A substantially pure preparation of a plasmin inhibitor characterised in that it is a single stage competitive inhibitor of plasmin, wherein "substantially pure" means that at least 60% of the total material in the preparation is the plasmin inhibitor.
2. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation constant for plasmin in the range of from $1 \times 10^{-8} \text{ M}^{-1}$ to $1 \times 10^{-10} \text{ M}^{-1}$.
3. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation constant for plasmin in the range of from $5 \times 10^{-8} \text{ M}^{-1}$ to $8 \times 10^{-9} \text{ M}^{-1}$.
4. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation constant for plasmin in the range of from $1 \times 10^{-9} \text{ M}^{-1}$ to $5 \times 10^{-9} \text{ M}^{-1}$.
5. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation rate constant for plasmin in the range of from $4 \times 10^{-5} \text{ sec}^{-1} \text{ M}^{-1}$ to $5 \times 10^{-7} \text{ sec}^{-1} \text{ M}^{-1}$.
6. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation rate constant for plasmin in the range of from $1 \times 10^{-6} \text{ sec}^{-1} \text{ M}^{-1}$ to $1 \times 10^{-7} \text{ sec}^{-1} \text{ M}^{-1}$.
7. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation rate constant for plasmin in the range of from $2 \times 10^{-6} \text{ sec}^{-1} \text{ M}^{-1}$ to $9 \times 10^{-6} \text{ sec}^{-1} \text{ M}^{-1}$.
8. (Currently Amended) The plasmin inhibitor of claim 1 comprising a polypeptide selected from the group consisting of:

(a) Lys-Asp-Arg-Pro-Asp-Phe-Cys-Glu-Leu-Pro-Ala-Asp-Thr-Gly-Pro-Cys-Arg-Val-Arg-Phe-Pro-Ser-Phe-Tyr-Tyr-Asn-Pro-Asp-Glu-Lys-Lys-Cys-Leu-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Glu-Gly-Asn-Ala-Asn-Asn-Phe-Ile-Thr-Lys-Glu-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala [SEQ ID NO:2];

(b) Lys-Asp-Arg-Pro-Glu-Leu-Cys-Glu-Leu-Pro-Pro-Asp-Thr-Gly-Pro-Cys-Arg-Val-Arg-Phe-Pro-Ser-Phe-Tyr-Tyr-Asn-Pro-Asp-Glu-Gln-Lys-Cys-Leu-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Glu-Gly-Asn-Ala-Asn-Asn-Phe-Ile-Thr-Lys-Glu-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala [SEQ ID NO:4];

(c) Lys-Asp-Arg-Pro-Asn-Phe-Cys-Lys-Leu-Pro-Ala-Glu-Thr-Gly-Arg-Cys-Asn-Ala-Lys-Ile-Pro-Arg-Phe-Tyr-Tyr-Asn-Pro-Arg-Gln-His-Gln-Cys-Ile-Glu-Phe-Leu-Tyr-Gly-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Asn-Phe-Lys-Thr-Ile-Lys-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala [SEQ ID NO:6];

(d) Lys-Asp-His-Pro-Lys-Phe-Cys-Glu-Leu-Pro-Ala-Glu-Thr-Gly-Ser-Cys-Lys-Gly-Asn-Val-Pro-Arg-Phe-Tyr-Tyr-Asn-Ala-Asp-His-His-Gln-Cys-Leu-Lys-Phe-Ile-Tyr-Gly-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Asn-Phe-Lys-Thr-Ile-Glu-Glu-Gly-Lys-Ser-Thr-Cys-Ala-Ala [SEQ ID NO:8];

(e) Lys-Asp-Arg-Pro-Lys-Phe-Cys-Glu-Leu-Leu-Pro-Asp-Thr-Gly-Ser-Cys-Glu-Asp-Phe-Thr-Gly-Ala-Phe-His-Tyr-Ser-Thr-Arg-Asp-Arg-Glu-Cys-Ile-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Asn-Phe-Ile-Thr-Lys-Glu-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala [SEQ ID NO:10]; and

(f) Lys-Asp-Arg-Pro-Lys-Phe-Cys-Glu-Leu-Pro-Ala-Asp-Ile-Gly-Pro-Trp-Asp-Asp-Phe-Thr-Gly-Ala-Phe-His-Tyr-Ser-Pro-Arg-Glu-His-Glu-Cys-Ile-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Lys-Gly-Asn-Ala-Asn-Asn-Phe-Asn-Thr-Gln-Glu-Gln-Cys-Glu-Ser-Thr-Cys-Ala-Ala [SEQ ID NO:12].

9. (Currently Amended) The plasmin inhibitor of claim 1, comprising a polypeptide having the general formula:

KDZPZYCZLBBZBGXCZXXXBXFÄYXBZZZZCBZFBYGGCXBNNNFXTXEECESTC

AA (I) (SEQ ID NO 67), wherein:

X is any amino acid selected from the group consisting of Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, Val, α -aminobutyric acid, L-N-methylalanine, α -amino- α -methylbutyrate, L-N-methylarginine, aminocyclopropane-carboxylate, L-N-methylasparagine, aminoisobutyric acid, L-N-methylaspartic acid, aminonorbornyl-carboxylate, L-N-methylcysteine, cyclohexylalanine, L-N-methylglutamine, cyclopentylalanine, L-N-methylglutamic acid, L-N-methylisoleucine, L-N-methylhistidine, D-alanine, L-N-methylleucine, D-arginine, L-N-methyllysine, D-aspartic acid, L-N-methylmethionine, D-cysteine, L-N-methylnorleucine, D-glutamate, L-N-methylnorvaline, D-glutamic acid, L-N-methylornithine, D-histidine, L-N-methylphenylalanine, D-isoleucine, L-N-methylproline, D-leucine, L-N-methylserine, D-lysine, L-N-methylthreonine, D-methionine, L-N-methyltryptophan, D-ornithine, L-N-methyltyrosine, D-phenylalanine, L-N-methylvaline, D-proline, L-N-methylethylglycine, D-serine, L-N-methyl-t-butylglycine, D-threonine, L-norleucine, D-tryptophan, L-norvaline, D-tyrosine, α -methyl-aminoisobutyrate, D-valine, α -methyl- γ -aminobutyrate, D- α -methylalanine, α -methylcyclohexylalanine, D- α -methylarginine, α -methylcyclopentylalanine, D- α -methylasparagine, α -methyl- α -naphthylalanine, D- α -methylaspartate, α -methylpenicillamine, D- α -methylcysteine, N-(4-aminobutyl)glycine, D- α -methylglutamine, N-(2-aminoethyl)glycine, D- α -methylhistidine, N-(3-aminopropyl)glycine, D- α -methylisoleucine, N-amino- α -methylbutyrate, D- α -methylleucine, α -naphthylalanine, D- α -methyllysine, N-benzylglycine, D- α -methylmethionine, N-(2-carbamylethyl)glycine, D- α -methylornithine, N-(carbamylmethyl)glycine, D- α -methylphenylalanine, N-(2-carboxyethyl)glycine, D- α -methylproline, N-(carboxymethyl)glycine, D- α -methylserine, N-cyclobutylglycine, D- α -methylthreonine, N-cycloheptylglycine, D- α -methyltryptophan, N-cyclohexylglycine, D- α -methyltyrosine, N-cyclodecylglycine, L- α -methylleucine, L- α -methyllysine, L- α -methylmethionine,

L- α -methylnorleucine, L- α -methylnorvaline, L- α -methylnornithine, L- α -methylphenylalanine, L- α -methylproline, L- α -methylserine, L- α -methylthreonine, L- α -methyltryptophan, L- α -methyltyrosine, L- α -methylvaline, L-N-methylhomophenylalanine, N-(N-(2,2-diphenylethyl carbamylmethyl)glycine, N-(N-(3,3-diphenylpropyl carbamylmethyl)glycine, and 1-carboxy-1-(2,2-diphenyl-ethyl amino)cyclopropane;

Y is a hydrophobic amino acid;

A is an aromatic amino acid;

Z is K, R, H, D, E, Q or N; and

B is a neutral amino acid, or P, A, G, S, T, V or L.

10. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 3 is H or R.
11. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 5 is K, N, E or D.
12. (Original) The plasmin inhibitor of claim 9, wherein the Y at position 6 is F or L.
13. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 8 is E or K.
14. (Original) The plasmin inhibitor of claim 9, wherein the B at position 10 is P or L.
15. (Original) The plasmin inhibitor of claim 9, wherein the B at position 11 is P or A.
16. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 12 is E or D.
17. (Original) The plasmin inhibitor of claim 9, wherein the B at position 13 is T or I.
18. (Original) The plasmin inhibitor of claim 9, wherein the X at position 15 is P, S or R.
19. (Currently Amended) The plasmin inhibitor of claim 9, wherein the Z at position 17 is K, N, E, D or R.
20. (Original) The plasmin inhibitor of claim 9, wherein the X at position 18 is D, G, A or V.

21. (Original) The plasmin inhibitor of claim 9, wherein the X at position 19 is F, N, K or R.
22. (Original) The plasmin inhibitor of claim 9, wherein the X at position 20 is T, P, F or I.
23. (Original) The plasmin inhibitor of claim 9, wherein the B at position 21 is G, V or P.
24. (Original) The plasmin inhibitor of claim 9, wherein the X at position 22 is A, S or R.
25. (Original) The plasmin inhibitor of claim 9, wherein the Å at position 24 is Y or H.
26. (Original) The plasmin inhibitor of claim 9, wherein the X at position 26 is S or N.
27. (Original) The plasmin inhibitor of claim 9, wherein the B at position 27 is P, A or T.
28. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 28 may be D or R.
29. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 29 is E, D, H or Q.
30. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 30 is H, K, R or Q.
31. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 31 is K, Q or E.
32. (Original) The plasmin inhibitor of claim 9, wherein the B at position 33 is L or I.
33. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 34 is E or K.
34. (Original) The plasmin inhibitor of claim 9, wherein the B at position 36 is L or I.
35. (Original) The plasmin inhibitor of claim 9, wherein the X at position 41 is E, G or K.
36. (Original) The plasmin inhibitor of claim 9, wherein the B at position 42 is C or G.
37. (Original) The plasmin inhibitor of claim 9, wherein the X at position 48 is K, N or I.
38. (Original) The plasmin inhibitor of claim 9, wherein the X at position 50 is K, Q or I.
39. (Previously Presented) The plasmin inhibitor of claim 8 or claim 9, wherein the polypeptide comprises a leader peptide comprising the sequence:- Met-Ser-Ser-Gly-Gly-Leu-

Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser [SEQ ID NO:14].

40. (Original) The plasmin inhibitor of claim 39, wherein the polypeptide is selected from the group consisting of:-

(a) Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-Arg-Pro-Asp-Phe-Cys-Glu-Leu-Pro-Ala-Asp-Thr-Gly-Pro-Cys-Arg-Val-Arg-Phe-Pro-Ser-Phe-Tyr-Tyr-Asn-Pro-Asp-Glu-Lys-Lys-Cys-Leu-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Glu-Gly-Asn-Ala-Asn-Asn-Phe-Ile-Thr-Lys-Glu-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala [SEQ ID NO:16];

(b) Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-Arg-Pro-Glu-Leu-Cys-Glu-Leu-Pro-Pro-Asp-Thr-Gly-Pro-Cys-Arg-Val-Arg-Phe-Pro-Ser-Phe-Tyr-Tyr-Asn-Pro-Asp-Glu-Gln-Lys-Cys-Leu-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Glu-Gly-Asn-Ala-Asn-Asn-Phe-Ile-Thr-Lys-Glu-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala [SEQ ID NO:18];

(c) Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-Arg-Pro-Asn-Phe-Cys-Lys-Leu-Pro-Ala-Glu-Thr-Gly-Arg-Cys-Asn-Ala-Lys-Ile-Pro-Arg-Phe-Tyr-Tyr-Asn-Pro-Arg-Gln-His-Gln-Cys-Ile-Glu-Phe-Leu-Tyr-Gly-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Asn-Phe-Lys-Thr-Ile-Lys-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala [SEQ ID NO:20];

(d) Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-His-Pro-Lys-Phe-Cys-Glu-Leu-Pro-Ala-Glu-Thr-Gly-Ser-Cys-Lys-Gly-Asn-Val-Pro-Arg-Phe-Tyr-Tyr-Asn-Ala-Asp-His-His-Gln-Cys-Leu-Lys-Phe-Ile-Tyr-Gly-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Asn-Phe-Lys-Thr-Ile-Glu-Glu-Gly-Lys-Ser-Thr-Cys-Ala-Ala [SEQ ID NO:22];

(e) Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-Arg-Pro-Lys-Phe-Cys-Glu-Leu-Leu-Pro-Asp-Thr-Gly-Ser-Cys-Glu-Asp-Phe-Thr-Gly-Ala-Phe-His-Tyr-Ser-Thr-Arg-Asp-Arg-Glu-Cys-Ile-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Asn-Phe-Ile-Thr-Lys-Glu-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala; [SEQ ID NO:24]; and

(f) Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-Arg-Pro-Lys-Phe-Cys-Glu-Leu-Pro-Ala-Asp-Ile-Gly-Pro-Trp-Asp-Asp-Phe-Thr-Gly-Ala-Phe-His-Tyr-Ser-Pro-Arg-Glu-His-Glu-Cys-Ile-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Lys-Gly-Asn-Ala-Asn-Asn-Phe-Asn-Thr-Gln-Glu-Gln-Cys-Glu-Ser-Thr-Cys-Ala-Ala; [SEQ ID NO:26].

41. (Withdrawn) An isolated polynucleotide encoding the polypeptide of claim 8.

42. (Withdrawn) An isolated polynucleotide selected from the group consisting of:

(a) AAGGACCGTCCGGATTTCTGTGAACTGCCTGCTGACACCGGACCATGTA
GAGTCAGATTCCCATCCTTCTACTACAACCCAGATGAAAAAAGTGCTAGAG
TTTATTTATGGTGGATGCGAAGGGAATGCTAACAATTTTATCACCAAAGAGG
AATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID NO:1];

(b) AAGGACCGTCCAGAGTTGTGTGAACTGCCTCCTGACACCGGACCATGTA
GAGTCAGATTCCCATCCTTCTACTACAACCCAGATGAACAAAAATGCCTAGA
GTTTATTTATGGTGGATGCGAAGGGAATGCTAACAATTTTATCACCAAAGAG
GAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID NO:3];

(c) AAGGACCGTCCAAATTTCTGTAACTGCCTGCTGAAACCGGACGATGTA
ATGCCAAAATCCCACGCTTCTACTACAACCCACGTCAACATCAATGCATAGA
GTTTCTCTATGGTGGATGCGGAGGGAATGCTAACAATTTTAAGACCATTAAG
GAATGCGAAAGCACCTGTGCTGCATGA [SEQ ID NO:5];

(d) AAGGACCATCCAAAATTCTGTGAACTCCCTGCTGAAACCGGATCATGTA
AAGGCAACGTCCCACGCTTCTACTACAACGCAGATCATCATCAATGCCTAAA
ATTTATTTATGGTGGATGTGGAGGGAATGCTAACAATTTTAAGACCATAGAG
GAAGGCAAAAGCACCTGTGCTGCCTGA [SEQ ID NO:7];

(e) AAGGACCGTCCAAAATTCTGTGAACTGCTTCCTGACACCGGATCATGTGA
AGACTTTACCGGAGCCTTCCACTACAGCACACGTGATCGTGAATGCATAGAG
TTTATTTATGGTGGATGCGGAGGGAATGCTAACAATTTTATCACCAAAGAGG
AATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID NO:9];

(f) AAGGACCGTCCAAAGTTCTGTGAACTGCCTGCTGACATCGGACCATGGG
ATGACTTTACCGGAGCCTTCCACTACAGCCCACGTGAACATGAATGCATAGA
GTTTATTTATGGTGGATGCAAAGGGAATGCTAACAACCTTTAATACCCAAGAG
CAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID NO:11];

(g) a biologically-active polynucleotide fragment of any one of SEQ ID NOS 1, 3, 5, 7, 9, 11, 12, 14, 16, 18 and 20; and

(h) a polynucleotide homologue of any of the foregoing sequences.

43. (Withdrawn) The polynucleotide of claim 42 further comprising a nucleotide sequence encoding a leader peptide.

44. (Withdrawn) The polynucleotide of claim 43, wherein the nucleotide sequence comprises the sequence:-

ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAGGTG
CTGACCCCCGTCTCCAGC [SEQ ID NO:13] or a biologically active fragment thereof,
or a polynucleotide homologue of these.

45. (Withdrawn) The polynucleotide of claim 43, wherein said polynucleotide is selected
from the group consisting of:

(a) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCGTCCGGATTTCTGTGAACTGCCTG
CTGACACCGGACCATGTAGAGTCAGATTCCCATCCTTCTACTACAACCCAGA
TGAAAAAAAGTGCCTAGAGTTTATTTATGGTGGATGCGAAGGGAATGCTAAC
AATTTTATCACCAAAGAGGAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID
NO:15];

(b) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCGTCCAGAGTTGTGTGAACTGCCTC
CTGACACCGGACCATGTAGAGTCAGATTCCCATCCTTCTACTACAACCCAGA
TGAACAAAAATGCCTAGAGTTTATTTATGGTGGATGCGAAGGGAATGCTAAC
AATTTTATCACCAAAGAGGAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID
NO:17];

(c) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCGTCCAAATTTCTGTAACTGCCTG
CTGAAACCGGACGATGTAATGCCAAAATCCCACGCTTCTACTACAACCCACG
TCAACATCAATGCATAGAGTTTCTCTATGGTGGATGCGGAGGGAATGCTAAC
AATTTTAAGACCATTAAGGAATGCGAAAGCACCTGTGCTGCATGA [SEQ ID
NO:19];

(d) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCATCCAAAATTCTGTGAACTCCCTG
CTGAAACCGGATCATGTAAAGGCAACGTCCCACGCTTCTACTACAACGCAGA
TCATCATCAATGCCTAAAATTTATTTATGGTGGATGTGGAGGGAATGCTAAC
AATTTTAAGACCATAGAGGAAGGCAAAAGCACCTGTGCTGCCTGA [SEQ ID
NO:21];

(e) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCGTCCAAAATTCTGTGAACTGCTTC
CTGACACCGGATCATGTGAAGACTTTACCGGAGCCTTCCACTACAGCACACG
TGATCGTGAATGCATAGAGTTTATTTATGGTGGATGCGGAGGGAATGCTAAC
AATTTTATCACCAAAGAGGAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID
NO:23];

(f) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCGTCCAAAGTTCTGTGAACTGCCTG
CTGACATCGGACCATGGGATGACTTTACCGGAGCCTTCCACTACAGCCCACG

TGAACATGAATGCATAGAGTTTATTTATGGTGGATGCAAAGGGAATGCTAAC
AACTTTAATACCCAAGAGCAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID
NO:25]; and

(g) GGAGCTTCATCATGTCTTCTGGAGGTCTTCTCTCCTGCTGGGACTCCTCA
CCCTCTGGGAGGTGCTGACCCCCGTCTCCAGCAAGGACCGTCCAGAGTTGTG
TGAAGTGCCTCCTGACACCGGACCATGTAGAGTCAGATCCCCATCCTTCTACT
ACAACCCAGATGAACAAAAATGCCTAGAGTTTATTTATGGTGGATGCGAAGG
GAATGCTAACCAATTTTATCACCAAAGAGGAATGCGAAAGCACCTGTGCTGC
CTGAATGAGGAGACCCTCCTGGATTGGATCGACAGTTCCAAGTTGACCCAAA
GACCCTGCTTCTGCCCTGGACCACCCTGGACACCCTTCCCCCAAACCCACCC
TGGACTAATTCTTTCTCTGCAATAAAGCTTTGGTTCCAGCT [SEQ ID NO:43]

46. (Original) A pharmaceutical composition for alleviating blood loss in a patient, said composition comprising the polypeptide of claim 8 and a pharmaceutically acceptable carrier.
47. (Withdrawn) A method for alleviating blood loss comprising the step of administering to a patient in need of such treatment a therapeutically effective dosage of the polypeptide of claim 8 in combination with a pharmaceutically acceptable carrier.
48. (Withdrawn) An anti-tumour agent comprising the polypeptide of claim 8 conjugated with an anti-fibrin antibody.
49. (Currently amended) The plasmin inhibitor of claim 1, comprising the amino acid sequence ECESTCAA **(SEQ ID NO. 68)**.
50. (Currently amended) The plasmin inhibitor of claim 1, further comprising the amino acid sequence NANNF **(SEQ ID NO. 69)**.
51. (Currently amended) The plasmin inhibitor of claim 49, further comprising the amino acid sequence YGGC **(SEQ ID NO. 70)**.
52. (Previously Presented) The plasmin inhibitor of claim 1, which is conjugated to an anti-fibrin antibody.
53. (Previously Presented) The plasmin inhibitor of claim 1, wherein "substantially pure" means that at least 75% of the total material in the preparation is the plasmin inhibitor.

54. (Previously Presented) The plasmin inhibitor of claim 1, wherein “substantially pure” means that at least 90% of the total material in the preparation is the plasmin inhibitor.

55. (Previously Presented) The plasmin inhibitor of claim 1, wherein “substantially pure” means that at least 95% of the total material in the preparation is the plasmin inhibitor.